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ABSTRACT

The range of methodological choices appropriate to adult education research is surveyed in this study. The most central consideration is the conflict between emphases on quantitative techniques and various approaches to researchable areas which are not grounded in positivistic/empirical designs. Skills, talents, defects, and ideologies reflected by these other approaches to research are explored and classified. Methodological conflict in adult education research is compared to similar dissensus in other educational and social science disciplines, including history, criminal justice, sociology, and competency-based teacher education. Areas other than quanto-techniques which are discussed include various descriptive techniques in policy analysis models, analytical philosophy, ethnomethodology, the cluster of psychohistory, historiography, and case study methods as well as exegetical and hermeneutical dimensions. A case against exclusive ideological commitment to single genres of method is presented, utilizing completed and ongoing reports of research to illustrate how such commitment may result in data production which generates artifacts of design and technique, rather than revelations of actual events, relationships, and experimental consequences. (Author/TA)

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WHAT IS "RESEARCH" IN ADULT EDUCATION?

Issues in Methodological Diversity

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..."The universe is only a gigantic system of reflexes produced by shocks. If I give you a clip on the knee you will wag your ankle."

"I will also give you a clip with my knobkerry; so don't do it," said the black girl.

"For scientific purposes it is necessary to inhibit such secondary and apparently irrelevant reflexes by tying the subject down," said the professor.

George Bernard Shaw

The Adventures of the Black Girl in Her Search for God

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I. Introduction

The task of this inquiry is to explore and classify the meanings of theory, philosophy, evaluation, and research in adult education. The setting is provided by observation of events by which philosophy, theory-building, and evaluation impact on research. The problem to be addressed is conflict stemming from restriction on methodological style and preference within research settings. Divergent methodological styles, particularly ethnomethodology and various forms of historical, philosophical, and anthropological research are suggested as overlooked assets in the study of adult education.

A few caveats are in order. First, while this study may note obtuse reverence for quantitative methodology, there is no question that contemporary researchers reasonably may be expected to comprehend diverse methodological approaches, both qualitative and quantitative, now available to them. There is a related need for greater "consumer" orientation by both approaches in conducting, funding, and teaching about research. There is nothing gained in common biases that there are intractably devious motives in the exercise of either statistical skill or philosophical reflection. In a field which must continuously link moral and technical forces in its service functions, no particular methodological bent may be subjected to "sustained abuse", cited by Hare (21) as the plight of "recent empirical researchers" in education. Ill-regard may be projected just as frequently and maliciously at non-empirical dimensions of research. To scholars, irrational regard, ignorance, and fear of certain methodological styles should be just as onerous as

obdurate allegiance to others.

The problem is one of exclusivity often vested in particular methodological approaches. This may inhibit growth among phenomenological orientations, for example, or restrict efforts to refine holistic strategies in research. Current research settings, as well as such influences as government agencies, foundations, and universities, may press scholars for more generalized commitments to research programs rooted exclusively in quantification techniques. In adult education, as elsewhere, these "institutional presses" may be traced from current mandates for accountability in principle, which has, in practice, become auditability. The attention of research and planning rivets on immediacy (producing more of a product faster) and observability (keeping up with the pace of induced change). More qualitatively based assessment, however, might explore encounters primarily within the moment of research. Not content with the common assumption of "procedural neutrality", these methods may seek to account for the impact and interest of the researcher himself. Such approaches to research have become "gifted underachievers" in the service of adult and continuing education. Perhaps they are overlooked in deference to the aura of certainty, rigor, and other "image" factors traditionally retained by more mechanistic approaches to research. As methodological styles assume ideological dimensions, the pitfalls of apperception extract a toll in ethics as well as skill and utility.

One final disclaimer. While this study gathers several "divergent" methodologies under the tent of research, none are prioritized. No hierarchy of styles is intended. This is especially important in adult and continuing education, given the diffuse and idiographic settings of program planning, evaluation, and needs assessment in adult education. Research styles in the field must be adaptive to such diffusion. It may be difficult, for example, for the nomothetic analyst "to contemplate the very real possibility that no two lives are alike in their motivational processes" (1:42). Perhaps the greatest loss to science in post-industrial cultures has been forgetting that one's primary task is to study what is. There is certainly room for occasional professional pursuits in the alteration of reality, or in applying favored "conceptual modalities" and techniques. These, however, should not restrict research to that which serves practice, nor science to applied research.

Practitioners need applied research. There is a need in the field for basic research as well. "Basic" research, as noted by the National Science Foundation, amounts to "original investigations for the advancement of knowledge that does not have specific objectives to answer problems of sponsoring agencies or companies, although these investigations may be in fields of present or potential interest to the sponsoring organization." "Applied" research centers on activities directed at "problems posed by sponsoring agencies or companies for the purpose of contributing to the solution of these problems" (38:67). Further, research, like learning, may occur and be applied in many different ways. Learning may disappear and re-emerge, unpredictably

and unexpectedly, as noted in inquiries into the "enduring" consequences of education (24). Erikson (16) has observed that, as a constant in adult life, learning may be more encompassing than discretely quantifiable derivations from childhood events. One may easily discern the converse of this position as prevailing policy in educational institutions today. There is increased observance of the positivist restriction that learning outcomes for children derive exclusively from task and activity analysis of adulthood. This practice was long ago initiated by Franklin Bobbitt (6) and W. W. Charcers (10), and seems cogent to current mandates for "proficiency" development patterns in secondary and continuing education (19). Relatedly, behaviorist studies in gerontology have usually linked slowing of general central nervous system functions to learning deficits. These findings have resulted from short-term memory and pair-association tests. However, Botwinick (7) has pointed out no significant decline in learning functions among the aged may be detected if one separates "performance" (involving both the pace and scope of learning) from "learning" (retention).

One particular observation is afforded by juxtaposing approaches to learning with approaches to research. This entails differentiating research from policy studies. In continuing education, as in the social sciences, organizations increasingly direct research to legitimate decisions made in realms apart from research (23). This has become as much an issue of politics and funding as of the pursuit of knowledge. As research is directed at (or by) an applied discipline, distinctions between understanding and predicting, or between knowledge and science, may

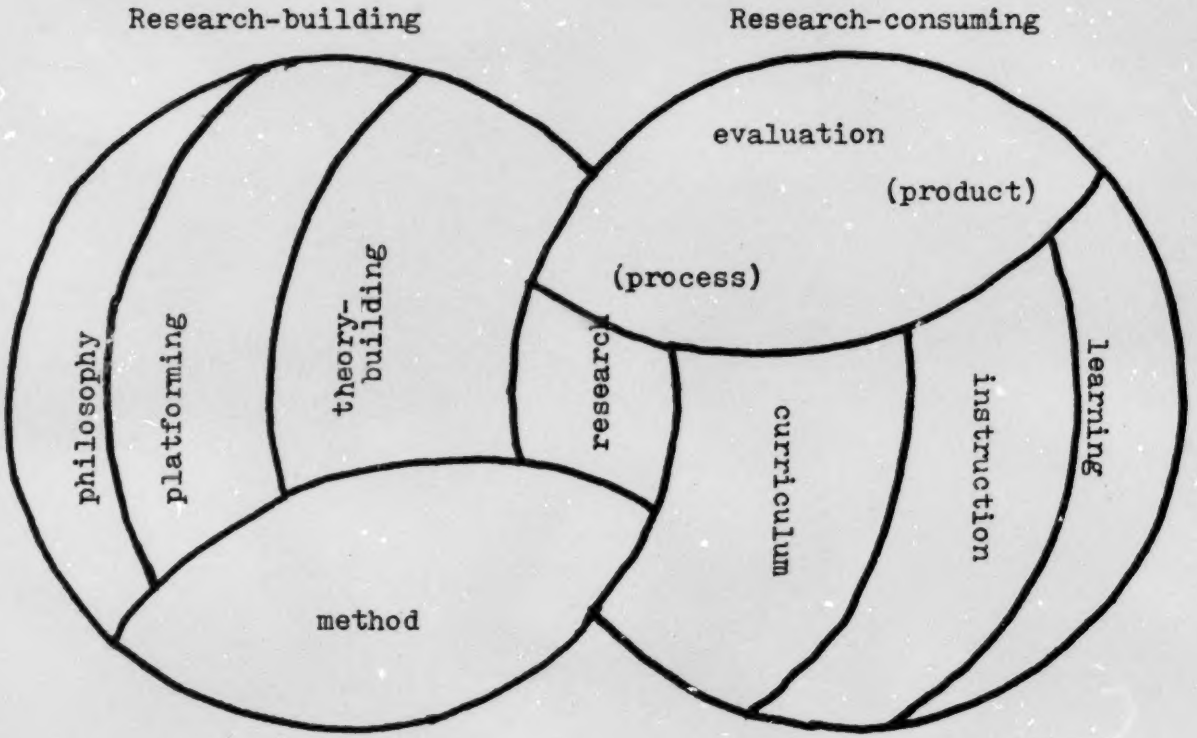
become quickly blurred (9,15). Yet both categories of activity are necessary to continuing education, unless it is to be clothed always in the ideological hand-me-downs carried with that knowledge it borrows from mainstream social and behavioral sciences. The critical factor here is that neither applied nor basic approaches to research are served by exclusion or imbalance in support services for one or the other.

II. The Collateral Development of Research Production Functions

So much concern has been raised about research outcomes that there has been some neglect of the antecedents to its methods. Research "bridges" praxiological elements of reflection and action. In continuing education, no one may be surprised that research may lead to improved practice. What leads to research, however, demands more explanation than trained inclination, "flash of genius", funding potential, or serendipity.

As suggested in Figure I, philosophy, platforming, and theory-building, respectively, build toward the research setting. Curriculum, instruction, and learning issue from research in continuing education. Process and product evaluation accompany these, just as methodological judgments are contained throughout the antecedents to research. Outcomes, in turn, are exposed to the tests of broader social and cultural settings. In this process, the "research building"/"research-consuming" cycle renews itself.

FIGURE I: RESEARCH-PRODUCTION FUNCTIONS
IN CONTINUING EDUCATION



1. Philosophy. Feringer (18) has recently discussed the "fragmented view of knowledge," separating truth-seeking functions from issues of utility in the pursuit of knowledge. This fragmentation is often regarded as a constant throughout the evolution of modern scientific techniques. It is most important to stress, however, the spiralling rapidity and force of this notion as technological-psychological socieities have emerged from industrial ones. Specialization and compartmentalization of knowledge, at least since Comte's efforts (11), have tended to permit some divergence among disciplinary assortments. Hence, studies in political economy, sociobiology, psycho-history, and many variations of engineering. Divergence, whether in philosophical foundations or in theory-building, has been another matter, when attention is directed to what goes on within disciplines. Illustrative of this process is Levine's observation (27) that American sociology "worked itself into a theoretical vacuum" four decades ago. Its academic leaders proclaimed "that the period of debate about fundamental assumptions in sociology was over, and that it was being replaced by a period of 'investigation and research.'" In continuing education, particularly when confronted with the demise of voluntarism and proliferation of mandatory lifelong learning programs, this is a current critical decision point. For example, may the fundamentally economic and political assumptions made about adult learners be subjected to scrutiny equal to that afforded "value-free" or objectivistic investigations?

The most rudimentary of all research antecedents is philosophy. It retains this spot by virtue of its intimate and critical relationship to the functions of human judgment. Whenever its

explicit and vital ties to theory, research, and science are neglected, one may begin to detect traces of ossification throughout the research-building process. Exploring the interplay of science and human values, Hammond and Adelman (20) found that government agencies, for example, have been sensitive to the paucity of broad conclusions which may be extrapolated from many "rigorous" studies which bridge the technological and the behavioral. These organizations have then sought out persons who might "'intuitively perform analysis and evaluations'", a process which often defies explicit formulations in combining information and value judgments. Too often such a process focuses on persons, not methods, and it is "defenseless against charges of self-serving bias."

Such difficulties may be overcome through more careful consideration of "methods" in philosophical formulations, as well as those in theory-building and research. Discussing the role of ethics, epistemology, and metaphysics in continuing education, Apps (3) has described the link between philosphy and research as a process by which variables are increasingly controlled. This study will further argue that "platforming" and theory-building are likewise cogent to the attainment of this objective. Each step requires testing and refinement. Each seeks corroboration in reality. Yet divergent philosophies are most likely to give rise to divergent theory-building exercises, not just divergent theories. Theoretical divergence, in turn, spawns multidimensional (not just multivariate) and frequently novel research methods and settings. Findings in research, as noted by Popper (35), can only be said to be "corroborated with respect to some system of basic statements."

These may be "non-empirical, logical concepts" or, as Carnap (8) described them, "syntactical concepts". They form the genesis of "paradigm shifts" (26) in our thinking about problems and how to solve them. In their occassional failure to use the language and styles of already sanctioned modes of inquiry, divergent philosophies should not be judged unspoken or unspeakable. They are indispensable as progenators of research.

2. Platforming. Walker (39) has depicted the educational "platform" of the curriculum developer as the "system of beliefs and values" one carries along to developmental tasks. Left implicit, platforms may be manifested as biases, apperceptions, and, at best, philosophical commitments. In any case, as Sergiovanni (36) has observed in applying the platforming concept to the field of clinical supervision, one's platform is a formation of "what one believes is possible, what one believes is true, and what one believes is desirable." Platforming functions include a sifting process by which philosophical inclinations are made more explicit and discriminating. Petrie (32) has characterized such events as "focussing", a process which disallows presuppositions of "a kind of neutral experiential base" on the part of researchers and theorists.

Perhaps John Dewey's description (13) of educational "standards" may be helpful in describing the platforming phase which precedes theory-building. He pointed out that "judgment as a sense of relative values involves abilities to select, to discriminate, by reference to a standard." Such standards are

too frequently presumed and infrequently described. Their explication is likely to reveal, for example, why some problems are addressed and others neglected in continuing education. Behavioristically-influenced reading programs in ABE and something beyond self-fulfilling evaluations in mandatory continuing education are examples of this, and each will be brought up again at the end of this paper. Enunciating one's platform indicates that the researcher has comprehended historical and ideological underpinnings in one's work. Accomplishing this, the field is likely to witness fewer theories and programs which, for example, advocate Skinnerian means to Maslowian ends. While ethically there is to be no restraint on the philosophical and even ideological orientations of diverse research activities, a concommitant responsibility remains to precisely aknowledge and examine one's value base, one's platform.

3. Theory-building. In introducing curriculum theory, Beauchamp (5) observes that modern education has developed as a technology rather than a science. What theory exists, then, is usually praxiological (29), deriving more from experience in the sanctioned "practical" affairs of running educational programs than from systematic and reflective critique. The question may be whether theory derives from conceptualization or from observation. The task of the latter is to discern what something is. Conceptualization, on the other hand, must decide that something is by casting its glance both within and beyond practice. Both conceptualization and observation are discovery-directed; however, observation has come to focus increasingly on educational products, while conceptualization is more directly attached to process.

Dubin (14) has listed five "units" of theory cogent to disciplined inquiry. These include enumerative, associative, relational, statistical, and summative units. Summative units, standing for "entire complex things" (e.g., mass society, self-actualization, underdeveloped economy, disaffected learners), are discarded by Dubin as useless to theorizing but essential to scientific investigation. Perhaps they are more appropriate as platforming constructs, but it is not clear as to why summative units in continuing education may not be useful in theoretical work. Ebel (15) has noted that the variables one must usually work with in education "are so global and encompass such a diversity of specifics as to defy precise definition and exact quantification." Unless one is to subscribe to the notion that educational enterprises are so practical as to preclude needs for theory, there is clearly a need to be able to employ such summative units in educational research.

Before examining some methodologically divergent patterns of research, one further differentiation must be established. Specifically, concepts of method and concepts of evaluation must be recognized by their distinctive properties. One commonly hears the expression, "method of evaluation"; however, this study perceives method as most appropriate to research antecedents, while evaluation is most often attached to research outcomes. The "method" of a theory may be analyzed, for example, but theory may defy evaluation. Method, as Buchler* argues, implies an

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*Buchler, J. The Concept of Method. New York: Columbia University Press, 1961.

"arrangement" of variables, but not necessarily an "application" of them. He notes further that "many important manifestations of methodic activity are inventive, not schematically reproductive; they involve the achievement rather than the transfer or imposition of a pattern."

Knowles' advocacy (25:121) of Kirkpatrick's four steps in evaluation provides a case in point. These steps, which seem to be more like types, are reaction evaluation, learning evaluation, behavior evaluation, and results evaluation. Their focus is on change in perceived learner behavior throughout the period of program participation. Evaluation, as noted by Sheats (37:462), "measures the amount of change; research seeks to identify the factors involved (in change) and to study their interrelationship." What this study describes as "divergent" methods carry research beyond the plateau of programs to exploration of the pinnacles and crevasses of adult learning realities, to the sometimes latent and marginal expressions of the "learning society".

III. Divergent Methods

Three methods---historiography, ethnomethodology, and hermeneutical-exegetical approaches---are included among the divergent. Others may wish to add a fourth---the dialectics of an emerging "critical theory" movement within the social sciences. With respect to continuing education research, each of these may be said to be "divergent" in at least three senses. First, their individualistic foundations have conflicted with the commonly high regard for data gleaned from groups. They have proposed communication of life histories that go beyond case studies.

The primacy of groups in contemporary research orientations is a problem addressed in the summation of this inquiry.

A second shared dimension among divergent methods is that they are, overall, holistic in their approaches to the interpretations of reality. Their frequent focus on the construction of "everyday" knowledge belies, ironically, concern for the "practical", inasmuch as what has been sanctioned as practical is frequently only that which prevailing definitions of social, political, and economic realities permit. Holistic thought, however, is not easily separated from inclinations toward individualism. Likewise, the problem of behaviorally-based group data superceding focus on individual idiosyncrasies is not peculiar to educational research and, for example, permeates nearly all contemporary aspects of instructional evaluation. Phillips (33), in his critique of Weiss, von Bertalanffy, Dewey, and other adherents of holistic and organistic systems theory, has pointed out the parallel developments of holistic and individualistic thought. The foundation of holistic conceptualization holds that parts of an organism and parts of its environment form a system. The researcher's dilemma is balancing reverance for the distinctiveness of the parts with attention to relationships among parts. Traditionally, as analysis progresses, one gains precision in observing groups or classes of data, while losing perspective on the distictiveness of both the parts and the whole. And, for the holistic researcher, the whole is at all times greater than the mere sum of the parts.

A third, final, and likewise related dimension among divergent methodologies entails the questioning of the behavioral assumptions internalized by most contemporary research paradigms.

Few researchers would substantially detract from a data base of observed behavior. It is another matter, however, to regard all behavior utilizable in research as observable, as well as to regard research as the exclusive terrain of systems of observation of tangible behavior. This has been the logic of positivist-empiricism. As Polanyi (34:98-99) has reasoned, this logic denies the "tacit dimension" of human consciousness:

> Consciousness, we are told, is not a tangible fact and we must hesitate therefore to attribute consciousness to any living being, animal or man. (This has promulgated the description of) findings as if consciousness did not exist.... This is the programme of behaviourism. It sets out, for example, to eliminate all references to the human mind, by substituting for the mind the sound of human speech when telling about a state of mind.

1. Historiography. Denzin (12:246, 28) describes historiography as "any method that attempts to collect, record, and analyze documents from the past and to weave these documents into a meaningful set of explanations" for the purposes of reconstruction. Earlier, he suggests that "the terms phenomenology, ethnomethodology, and symbolic interactionism represent different attempts to confront empirical reality from the perspective of those who are being studied." While there have been recent quanto-historical attempts to assign numerical dimensions to the significance of historical events, historiography may reasonably stop short of readily quantifiable entities. There is, as Tugendhat (30:257) suggests of Husserl's phenomenology, a difference between methodical principles which "claim only what you can see clearly" and those which "claim only what you can show clearly."

The point in the introduction of more descriptive and subjective historiographic measures in continuing education centers on 1) discovering and confirming the precedents for formal knowledge-gaining functions in adult life, 2) adult perceptions of the quality and quantity of knowledge to be gained, and 3) variegated intended measures of knowledge transmitted through formal learning encounters.

A linkage of historiography and ethnomethodology is suggested by historian John Clive's analysis* of subjectivity in historical method. Disguising one's presence as reporter of events is one recurrent pattern:

> (There is) the assumption that the ever-beckoning, though illusory, goal of "objectivity" is somehow fostered by an impersonal mode of writing--- perhaps mainly in the conviction that good taste dictates distance between author and reader.

And yet, if one considers issues aside from vanity and taste, it seems so futile to camouflage either the historian's or the educational researcher's inherent interests. This not only suggests accountability in the most basic sense, but acknowledges growing public knowledge and misapprehension about experimentation and research. What Clive goes on to note in art and literature is perhaps even more characteristic of many adult learner's expectations as the stuff of research:

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*Clive, J. "The Most Disgusting of the Pronouns." The American Scholar 46 (Winter 1976-1977):104, 106.

> One of the predominant trends of our own time is that increasingly spectators, listeners, and readers expect to be more than passive observers....If they cannot themselves participate,...they want at the very least to be privy to the effects and methods that went into the making....

2. Ethnomethodology. This tradition propels research beyond not only statistical reliance, for example, but calls into question the efficacy of so-called unobtrusive measures as well. It is linked to the dialectical tradition of "critical theory", which, as noted by Farganis (17: 487) contrasts the all-pervasive technological rationality in advanced industrial society. It is not merely a matter now of the holistic versus the specific, but of dialectics versus functional analysis. Mehan and Wood (31:207) contend that ethnomethodology is an activity transcending both logico-empiricism and the hermeneutical-dialectical tradition. While it borrows its methodology from the former, it derives theory from the latter. It is, according to Attewell (4:182), "the study of methods by which members (socially functioning human beings) make sense out of their world." This approach has usually been neglected, ironically, by concentrated efforts in the study of adult learning systems. The irony is most of all in the matter of practicality, inasmuch as ethnomethodology becomes "the study of how members build accounts of social action, while doing that action."

3. Hermeneutics. Thus, ethnomethodology as method attaches itself to praxis and to understanding that observers always in part constitute the scenes observed. Its theory, however, rests

in the hermeneutical mode:

> Blake is the classic poet of this tradition; Kierkegaard was a spokesman early in the nineteenth century, Nietzsche at the sentury's end. In the twentieth century it has been represented by some phenomenologists and existentialists, by the Frankfurt School, and by the philosophies of the later Wittgenstein, Polanyi, and Feyerabend, and others (31:207).

One is confronted now with the spectrum of exegetical, or interpretive skills. The uniquely functional role of a general hermeneutical method may be observed, for example, in the setting of linguistic analysis. Positivism, Hirsch (22:23) notes, may be "right to insist that there must be some correlation between linguistic form and linguistic meaning, but one difficulty is that linguistic form cannot itself be confidently perceived or described." He proposes a compromise hermeneutics which holds that "the very same word sequence can have a different meaning by virtue of having a different illocutionary force":

> The positivist (finds) that a force or act beyond the mere locution and its rules is indeed required for a definitive meaning. On the other hand, ...the intuitionist (sees) that illocutionary acts do not reside in an arbitrary subjective domain, but belong to the convention-system of language.... (22:26)

IV. Conclusions

Ethnomethodology, exegetical, holistic, hermeneutic, historiographic---in introducing such novel (yet ageless) concepts, one must apologize for the traditional burden of language.

These are only suggested tools for divergent inquiry into continuing education phenomena. There are of course, many others. An alarming absence in the contemporary spectrum of methodological preferences centers on non-verbal domains. This is accompanied, of course, by an abundance of approaches to research which are completely dependent upon written and spoken language. Likewise, as Worthen (40) observes in his listing of competencies for educational research and evaluation, one finds growing demand for statistical skills and related mastery of mathematical symbols and functions. It is unavoidable here to note, however, a paucity of concern for the ethical dimensions of research, as well as for those divergent research styles which, in an ethical sense, hear a different drummer. When researchers develop too stolid a reverence for any particular pattern of reverberations, we risk becoming mesmerized and vulnerable to the decay which accompanies all fixations.

Such pitfalls may be inevitable consequences of borrowing so many methods and metaphors from other disciplines. One may not be interdisciplinary until one specifies something distinctive within one's field to be taken into the arena for exchanging ideas across disciplinary frontiers. The most usual observation at this point is the dependence of educational study on the social sciences and psychology. But the social, psychological, and moral forces impinging on education may not always lend themselves to revelation through the traditional modes of empiricism. In attending to the texture, erosion, and accretion

of ideational power, the educational researcher mat require direction apart from that of the physical ecologist. In a related sense, sociology has begun to squirm away from the reductionist stance, typified by George Lundberg's work,* which insisted on an image of society as a matrix of mechanical forces. Over a decade ago, Homans** charged that profession with the mission of transcending structuralist-functionalist dicta. He argued that "to show the interrelationships of institutions is not the same thing as explaining why the interrelationships are what they are." Perhaps it is time to suggest something similar in conventional approaches to understanding the cognitive and affective learning traits of adults.

Dependency on mechanistic preconceptions has led to much superficiality and misunderstanding of educational events. Luecke and McGinn (28), for example, have demonstrated how regression analysis utilizing cross-sectional data on educational programs and student achievement have resulted in studies reporting mere artifacts of themselves. Such data tells "us little about how a dynamic system has worked in the past, or how it could be made to work in the future....Regression analysis fails to detect dynamic relationships." Yet the aura of certainty and the artifacts of scientism compel such usage. Technique, what Ellul***

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*Lundberg, G. "Some Convergences in Sociological Theory." American Journal of Sociology 62 (July, 1956): 21-27.

**Homans, G. "Bringing Men Back In." American Sociological Review 29 (December, 1969): 811.

***Ellul, J. The Technological Society. New York: Knopf, 1964.

has described as "the principal law of our age," prevails, and "everything which is technique is necessarily used as soon as it is available, without distinction of good or evil."

In both ethical and methodological dimensions, then, there has been some neglect of what Apple and Wexler (2) identified as prior questions, to be addressed before research is initiated:

> (These) would be of a different logical and political type. (Whose knowledge is it? Why is it being taught to this particular group, in this particular way? What are its real or latent functions in the complex connections between cultural power and the control of the modes of production and distribution of goods and services in an advanced industrial economy like our own?).

When insufficiently influenced by such prior questions, research may leave the education of adults vulnerable to iatrogenesis, or debilitations in one setting arising from solutions applied in another. Examples to which this study has previously referred include ABE reading programs and the progression of mandatory continuing education. What is likely to be projected by separating reading skill from reading comprehension, as one finds in the National Assessment of Educational Progress? Behaviorally-slotted reading programs may become so residually onerous in their technique that a prevailing outcome is an intractible aversion to reading. A technically competent reader, for example, might grow to abhor reading. Relatedly, as compulsory lifelong learning situations proliferate, for example, in continuing professional education, iatrogenic effects are likely to include exponential growth in meritocratic procedures and controls.

Thus, recurrent empirical focus on the practical, on what can be done within prevailing political and social contexts, curtails the researcher's vision. Divergent theory and research take into account what is desirable in spite of current social and political restraints. Such questions, when operationalized, discern programs for training competence from encounters which educate for critical consciousness. The ultimate problem, again, is that of the primacy of group-based study in isolation from probes from more liberative individualistic paradigms. Philosopher William Gass* reminds us that "groups feel with a shallow though terrifying strength, like a wind over an inland lake; they cause, but they neither think nor create,..." One might hope that future directions in continuing education research might ask not only the causational what and how, but also the thinking whether, the inquiring why, and the creative if.

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*Gass, W. "Theatrical Sartre." New York Review of Books 23 (October 14, 1976): 24.

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